

**TECHNICAL REPORT
NATICK/SP-18/001**



AD _____

SOLDIER READINESS: INSIGHTS FROM QUALITATIVE INTERVIEWS

**by
Ellen P. Merrill
Justine Federici
Caelli Craig
F. Caroline Davis
and
Jason Augustyn**

January 2018

Special Project
January 2015 – October 2017

Approved for public release; distribution is unlimited

**U.S. Army Natick Soldier Research, Development and Engineering Center
Natick, Massachusetts 01760-5020**

DISCLAIMERS

The findings contained in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

Citation of trade names in this report does not constitute an official endorsement or approval of the use of such items.

DESTRUCTION NOTICE

For Classified Documents:

Follow the procedures in DoD 5200.22-M, Industrial Security Manual, Section II-19 or DoD 5200.1-R, Information Security Program Regulation, Chapter IX.

For Unclassified/Limited Distribution Documents:

Destroy by any method that prevents disclosure of contents or reconstruction of the document.

REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.						
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.						
1. REPORT DATE (DD-MM-YYYY) 10-01-2018		2. REPORT TYPE Special Project		3. DATES COVERED (From - To) January 2015 – October 2017		
4. TITLE AND SUBTITLE SOLDIER READINESS: INSIGHTS FROM QUALITATIVE INTERVIEWS				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Ellen P. Merrill, Justine Federici, Caelli Craig, F. Caroline Davis, and Jason Augustyn				5d. PROJECT NUMBER 16-263		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Natick Soldier Research, Development and Engineering Center ATTN: RDNS-SEW-TDC 10 General Greene Avenue, Natick, MA 01760-5020				8. PERFORMING ORGANIZATION REPORT NUMBER NATICK/SP-18/001		
				10. SPONSOR/MONITOR'S ACRONYM(S)		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.						
13. SUPPLEMENTARY NOTES						
14. ABSTRACT The U.S. Army Natick Soldier Research, Development, and Engineering Center (NSRDEC) is taking a comprehensive approach to optimizing and enhancing Soldier readiness across cognitive, physical, social, and emotional (CPSE) domains. Relatively little is known about the social and emotional (SE) components of Soldier readiness in comparison to the cognitive and physical (CP) domains. In addition, there is not an integrated approach to investigate how CPSE domains interact and influence performance. From January to May 2016, the research team conducted three qualitative studies with Soldiers including platoon, squad, and team leaders from the 82 nd Airborne Division, Fort Bragg, NC. The purpose of these studies was to better understand what the Army can do to help Soldiers prepare and build their SE readiness pre-deployment, sustain their readiness throughout a deployment, and restore it post-deployment. The data from these studies helped the research team identify eight major traits, skills, and behaviors critical to SE Readiness: Prosocial Behavior, Emotion Regulation, Group Cohesion, Sensation Seeking, Self-Efficacy, Moral Character, Resilience, and Mentoring. Soldiers described various readiness training methods they currently utilize to ensure knowledge transfer of tactical and technical skills and use of equipment and weapon systems. These skills are often referred to as the "what and how" or primary skills, which are generally delivered through official Army training. Other core competencies were physical readiness (e.g. endurance and strength) and "soft skills," such as emotional awareness, coping, resiliency, and character. These "soft skills" are often referred to as supportive or secondary skills. Soldiers acknowledged that these secondary skills are important for SE readiness, but also indicated that SE readiness can both positively and negatively impact CP performance. They reported that although critically important, there is limited training readily available for SE skills and that current training does not meet the operational need for SE readiness. Therefore, to support a holistic approach to Soldier Readiness, funding appropriations must be distributed comparably between SE and CP research and development. Soldiers can perform without honing SE skills; however, they cannot perform to their full potential without cost over time to themselves, their families, and to the Army.						
15. SUBJECT TERMS						
MOOD	EMOTIONS	TASK PERFORMANCE AND ANALYSIS		HUMAN BEHAVIOR	DEPLOYMENT	
COPING	INTERVIEWS	COPING SKILLS		HUMAN EMOTIONS	PERFORMANCE(HUMAN)	
MORALE	COGNITION	COPING BEHAVIOR		DATA COLLECTION	STRENGTH(PHYSIOLOGY)	
SURVEYS	STATISTICS	MENTAL HEALTH		QUALITY OF LIFE	OPERATIONAL READINESS	
COHESION	LEADERSHIP	QUESTIONNAIRES		MENTAL READINESS	ENDURANCE(PHYSIOLOGY)	
MISSIONS	TEAMWORK	PHYSICAL FITNESS		SOLDIER READINESS	INTERPERSONAL RELATIONS	
FEEDBACK	PSYCHOLOGY	ARMY PERSONNEL		SOCIAL PSYCHOLOGY	MORALS(SOCIAL PSYCHOLOGY)	
STRESSORS	MOTIVATION	GROUP DYNAMICS		BEHAVIORAL SCIENCES	CONFLICT(PSYCHOLOGY)	
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			Ellen P. Merrill	
U	U	U	SAR	108	19b. TELEPHONE NUMBER (include area code) 508-233-5116	

This page intentionally left blank

Soldier Readiness: Insights from Qualitative Interviews

Principal Investigators:

Ellen Merrill, Research Psychologist, Cognitive Science & Applications Team, WARFIGHTER NSRDEC, 508-233-5116, ellen.p.merrill.civ@mail.mil

Justine Federici, Engineering Psychologist, Consumer Science Team, WARFIGHTER NSRDEC, 508-233-4321, justine.federici.civ@mail.mil

Co-Authors: Caelli Craig, Caroline Davis, Jason Augustyn



UNCLASSIFIED



US ARMY
RDECOM

Disclaimer



The views expressed in this presentation are those of the authors and do not reflect the official policy of the Department of the Army/Navy/Air Force, Department of Defense, or U.S. Government.



US ARMY
RDECOM

Table of Contents



Terms of Reference.....	3
Background.....	4
Methods.....	14
Study 1.....	15
Study 2a.....	35
Study 2b.....	54
Findings.....	22
Study 1.....	23
Study 2a.....	37
Study 2b.....	56
Research Products.....	67
Conclusions.....	85
Recommendations.....	94



US ARMY
RDECOM

Terms of Reference



Definition of terms used throughout this report:

Readiness	The ability and willingness to perform an assigned task or mission. (US Army Ready and Resilient Campaign)
Cognitive	Anything having to do with paying attention, understanding situations, remembering information, making judgments, decision-making, and other mental tasks.
Physical	Anything having to do with physical performance (strength, endurance, agility) and sustaining physical well-being.
Social	Anything having to do with interacting with other people, including fellow Soldiers, local nationals, civilians, etc.
Emotional	Anything having to do with managing your emotions, handling stress, and sustaining emotional well-being.



US ARMY
RDECOM



Background



US ARMY
RDECOM

Research Objective



- The U.S. Army Natick Soldier Research, Development, and Engineering Center (NSRDEC) is taking a comprehensive approach to optimizing and enhancing Soldier readiness across cognitive, physical, social, and emotional (CPSE) domains.
- The NSRDEC and the Army as a whole has a less detailed map of the research landscape for the social and emotional components of readiness. The drive toward cognitive overmatch underscores the urgent need for a holistic CPSE approach to human systems integration.
- This work supports the Army Chief of Staff's stated priority of sustaining readiness across the force:

"We must ensure the Army remains ready as the world's premier combat force. Readiness for ground combat is and will remain the U.S. Army's #1 priority."

-- Army Chief of Staff General Mark Milley, August 2015



US ARMY
RDECOM

What is the Challenge?



Relatively little is known about the social and emotional (SE) components of Soldier readiness in comparison to the cognitive and physical (CP) domains. In addition, there is not an integrated approach to investigate how CPSE domains interact with and influence performance.

"I mean, everything [CPSE] is obviously tied together because we're not simple animals. The social aspect, at least when it comes to war, is probably the most important aspect of war. What makes a unit good is the strength of its social gas tank."

-- 82nd Airborne Division, Fort Bragg, NC

"When we received the news that we were being watched by a machine gun that we didn't know where it was... I'd say emotion, as a leader, you can't show it. That's really bad."

-- 82nd Airborne Division, Fort Bragg, NC

"It's an emotional weight... just getting everybody home safe is what you want to do. But it's also relative because you're still in the middle of deployment. This is just one day."

-- 82nd Airborne Division, Fort Bragg, NC

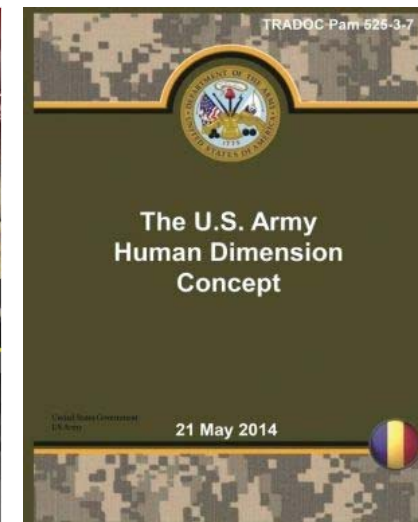
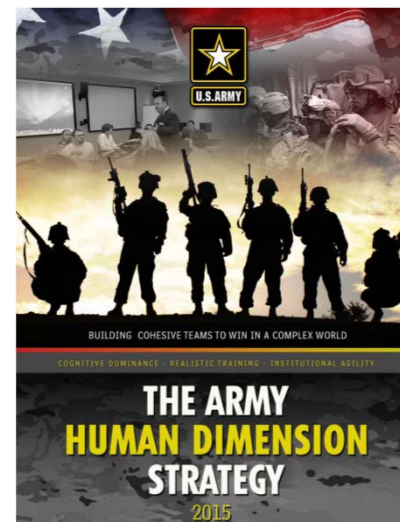


US ARMY
RDECOM

Connection to the Human Dimension



“Through investment in its human capital, the Army can maintain the decisive edge in the **human dimension** – the **cognitive, physical, and social components of the Army’s trusted professionals and teams.**”



This work directly supports Objective 1.2 of LOE 1 (Cognitive Overmatch) in the emerging Human Dimension strategy under development by ARI/TRADOC/ARCIC. Objective 1.2 calls for the development of “trusted Army professionals who thrive in complex social environments, adapt to diverse cultures, communicate effectively, and build relationships.” By identifying the core states, traits, and processes that underlie social and emotional components, this work will provide an essential baseline for developing approaches to meeting this objective.



US ARMY
RDECOM

Army Warfighting Challenges



ARMY WARFIGHTING CHALLENGES

As of 1/31/2017

Enduring first-order problems, the solutions to which improve the combat effectiveness of the current and future force.

9. Improve Soldier, Leader and Team Performance

How to develop resilient Soldiers, adaptive leaders, and cohesive teams committed to the Army professional ethic that are capable of accomplishing the mission in environments of uncertainty and persistent danger.

10. Develop Agile and Adaptive Leaders

How to develop agile, adaptive, and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, and leading and assessing operations in complex environments and against adaptive enemies.



US ARMY
RDECOM

Research Questions



Research questions were shaped to identify and characterize:

- How do Soldiers interpret the meaning of Soldier Readiness?
- How do Soldiers describe SE factors on Soldier Readiness and the impact of CPSE fluctuations in the context of squad-level operations?
- What factors within combat tasks and events affect Soldiers' SE resource capacity and how Soldiers utilize knowledge, skills, and abilities (KSAs) to manage SE demands during a mission?
- What psychological states, traits, and behaviors are associated with SE aspects of Soldier Readiness?
- What training practices and programs do leaders utilize within their unit to keep their Soldiers "ready"?
- What traits and behaviors are needed to uphold expected standards within the Army?
- What KSAs, traits, and behaviors do Soldiers believe are critical to effective leadership at the squad and team leader levels?



US ARMY
RDECOM

Overview



- From January to May 2016, the research team conducted a series of qualitative studies with Soldiers from the 82nd Airborne Division, Fort Bragg, NC.
 - Study 1: Mission interviews
 - Study 2a: Leadership interviews
 - Study 2b: Leadership essays
- The purpose of these studies was to better understand what the Army can do to help Soldiers prepare and build their social and emotional (SE) readiness pre-deployment, sustain their readiness throughout a deployment, and restore it post-deployment.
- Readiness was separated into three domains adopted from the Army Human Dimension Strategy: Cognitive, Physical, and Social (CPS).
- Pilot work with Subject Matter Expert (SME) Soldiers proposed the addition of a fourth domain, Emotional, to better differentiate each aspect of readiness - Cognitive, Physical, Social, Emotional (CPSE).



US ARMY
RDECOM

Research Products



The data and findings from Studies 1, 2a, and 2b were synthesized to generate the following research products:

- Taxonomy based on the major themes revealed by Soldiers as being critical to SE Readiness.
- Social Network Analysis (SNA) from focus areas within Taxonomy to establish the SE research landscape over the past 10 years and identify the top researchers in these fields.



US ARMY
RDECOM



Study 1: Mission Interviews



US ARMY
RDECOM

Study 1: Objectives



- Objective 1: Characterize SE factors on Soldier Readiness and investigate the impact of CPSE fluctuations in the context of squad-level operations.
- Objective 2: Identify factors within combat tasks and events that may affect Soldiers' SE resource capacity and understand how Soldiers utilize specific knowledge, skills, and abilities (KSAs) to manage SE demands during a mission.
- Objective 3: Explore the psychological states, traits, and behaviors that are associated with SE aspects of Soldier Readiness.
- Objective 4: Understand how Soldiers interpret the meaning of Soldier Readiness.

*Also an objective in Study 2a, will be discussed in the Conclusions section.



US ARMY
RDECOM

Study 1: Participants and Operational Context



- Participants were active duty infantry Soldiers (n=8) in various duty positions from the 82nd Airborne Division, Fort Bragg, NC.
- During the interviews, Soldiers described a mission that they executed together in Afghanistan during the Spring of 2014.
 - This mission was an offensive operation in mountain-desert terrain and was approximately 14-16 hours long.
 - Soldiers received an Operational Order (OPORD) approximately two days prior to the mission and started pre-mission tasks at the camp.
 - Soldiers left their base camp in the early morning hours while it was still dark. They were transported by Chinook helicopters to a location where they began movement to a planned objective point.
 - Soldiers experienced many challenges during the mission and unexpectedly had to engage in enemy contact, which resulted in their Platoon Leader (PL) being seriously injured.
- All Soldiers described in detail the tasks performed and events that occurred during the day-long mission. They explained how they managed challenges and what they did to reset and recover when they returned back to base camp.



US ARMY
RDECOM

Study 1: Method



- A preliminary study was conducted with SME Soldiers (n=4) to ensure an understanding of objectives, interview questions, and sense of timing for each session. Based on this feedback, a fourth domain, Emotional, was added to better differentiate each aspect of readiness (CPSE).
- Based on the methodology developed through preliminary testing, in-depth interviews (60-120 minutes) were conducted with active duty infantry Soldiers (n=8) who had deployed and executed the same mission together.
- Sessions were conducted using a discussion guide and a “mission map” to aid Soldiers in walking through their mission and to record timing of key events.
- Interviewers used a “gas tank” metaphor to characterize resource demands, and Soldiers used visual analog rating scales to indicate the degree to which each event impacted CPSE readiness.
- While using a “talk aloud” methodology, Soldiers were asked to identify key events that occurred throughout the mission. Interviewers guided them through each event to collect details on how the event may have affected CPSE resources. These resources were categorized as: prepare, depletes, KSAs, traits/behaviors, and restore.
- Interviews were audio recorded and transcribed verbatim.



US ARMY
RDECOM



Study 1: Data Collection Materials



Interview Questions



Examples of Topics Discussed:

- After you have received your OPORD, what is the first thing that you remember?
- Can you describe to us what you did prior to leaving the base camp to get “ready” for this particular mission? What did you do to prepare your CPSE capacity, describe?
- Were there specific activities/situations/tasks in your experience that you believed influenced your gas tank? Tell us the first place that you are aware that some change has occurred (when, why, & how).
- What did you do to manage your CPSE capacity, describe?
Probes: Knowledge, Skills, Abilities
- Please discuss your reentry to camp? How full or empty is your gas tank? Has it changed?

Discussion Guide Outline

Introduction and Purpose:

Today we want to talk to you about Soldier Readiness. We know that when a Soldier leaves the wire for a mission they are deemed “ready.” But what does that mean to you? An analogy that might help you to think about this or understand what we mean, is to think of a car with a gas tank that is on “full”. What we are interested in learning from you is how that gas tank is impacted (depleted or replenished) throughout the mission. Does it stay the same? Does it go down or up? What are the factors that would influence in what direction the gauge is moved? To help guide our conversation, we would like you to tell us about a mission which was significant to you. We would like you to walk us through the mission and to tell us things such as what you are looking at, thinking, doing, and feeling to maintain your readiness.



As a first step, we want you to think back to a particular mission that was particularly socially and/or emotionally draining (e.g. we say socially or emotionally but you can also describe other factors like cognitive or physical elements that may have impacted your functioning or behavior), we would like you to take a look at this map and share with us your experiences. We might pause you at times and ask a few questions to gain a better insight on what this mission was like for you.

1. After you have received your OPORD, what is the first thing that you remember?
2. Can you describe to us what you did prior to leaving the base camp to get “ready” for this particular mission? What did you do to prepare your CPSE capacity, describe?
3. Were there specific activities/situations/tasks in your experience that you believed influenced your gas tank? Tell us the first place that you are aware that some change has occurred (when, why, & how).
4. What did you do to manage your CPSE capacity, describe? *Probes: Knowledge, Skills, Abilities*
5. Please discuss your reentry to camp? How full or empty is your gas tank? Has it changed?
6. Can you describe to us what you did after this particular mission to maintain “or replenish your reserves”?
7. Looking back, what were some of the peak moments that impacted your readiness level most? Can you describe?
8. Please take a look at the Army’s definition of Readiness [show them the sentence on separate sheet]. Is this how you would define? How do you as a Soldier define readiness?
9. What are the most important traits/characteristics that Soldiers should have?
10. What characteristics most ensures your ability to prepare/maintain readiness?



Mission Map



Timeline
Type of Mission- Offense-Defense-Stability/Humanitarian
How long was the Mission - <12 - >12 - >24 - <48 - >48
Terrain- Mountain-Desert-Both-Urban-Desert-Both - All
Size - Sqd/Plt/Co/Bn

Duty Position RM-GDR-SAW-TL-SL-PSG-1SG
Load/lbs_____
Your Experience_____
Combat - Where?
Training - Where?

C/P/S/E Mission Map

C/P/S/E

Time_____

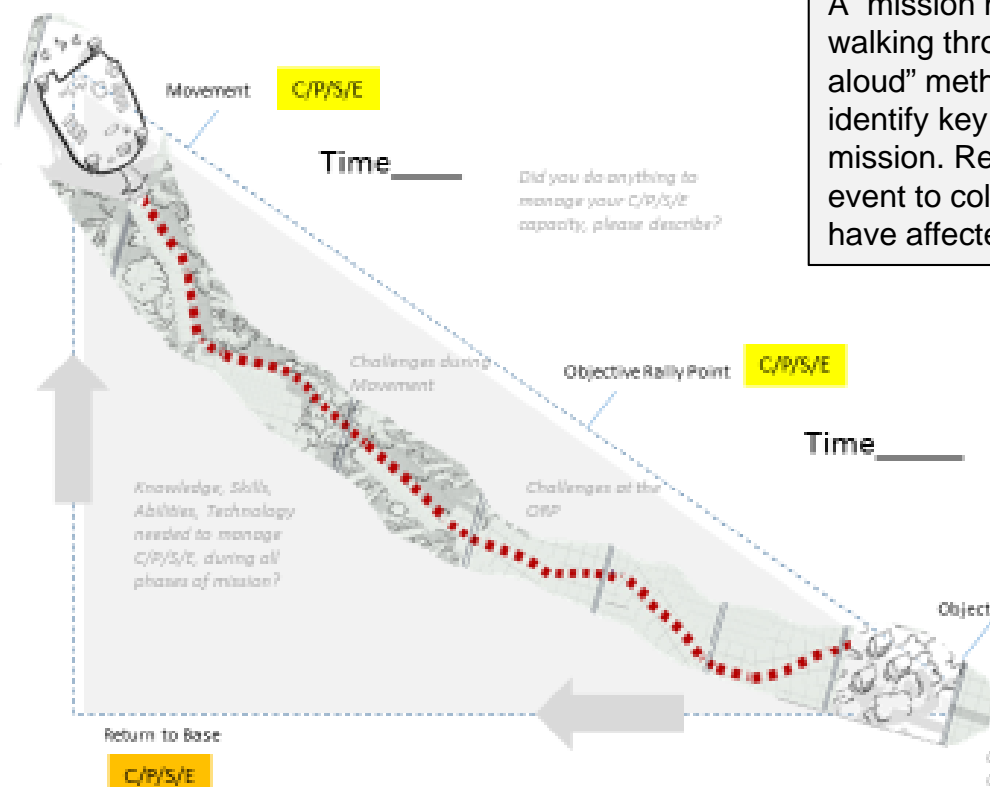
Pre-Mission Tasks
at the Camp

Did you do anything
to prepare for your
C/P/S/E capacity,
please describe?

Reset

C/P/S/E

Did you do anything
to restore your
C/P/S/E capacity,
please describe?



A "mission map" was used to aid Soldiers in walking through their mission. While using a "talk aloud" methodology, Soldiers were asked to identify key events that occurred throughout the mission. Researchers guided them through each event to collect details on how the event may have affected CPSE resources.



CPSE “Gas Tank” Rating Scales



A “gas tank” tool was used to indicate the degree to which each key event impacted CPSE readiness. Soldiers were asked to place a hash mark on the line to indicate their level of readiness in each domain.

Cognitive	Physical	Social	Emotional
Full	Full	Full	Full
Empty	Empty	Empty	Empty



Researchers guided Soldiers through each key event to collect details on how the event may have affected CPSE resources. These resources were categorized as: prepare, depletes, KSAs, traits/behaviors, and restore. As Soldiers described various tasks and events, researchers asked them to note specific resources that they perceived they needed to manage pre-mission, during, and post-mission.

[illegible]



US ARMY
RDECOM

Analysis Approach



- The interview transcripts were managed and analyzed using Word and Excel 2013 (Microsoft) and NVivo 10 (QSR International).
- Data were organized in NVivo by topic area based on the research questions.
- Three researchers independently analyzed the data for each topic and identified insights (i.e. key takeaways or findings from the data).
- The researchers then integrated their findings and adjudicated any discrepancies in identification of insights.
- Direct quotes were utilized to illustrate major themes and insights with specific examples.
- Responses under each CPSE resource category - prepare, depletes, KSAs, traits/behavior, and restore - were tabulated, and the top 10 were identified for each category.
- CPSE “gas tank” ratings were measured on visual analog scales and summary statistics were illustrated in graphical format to indicate the degree to which events along the mission impacted each domain.



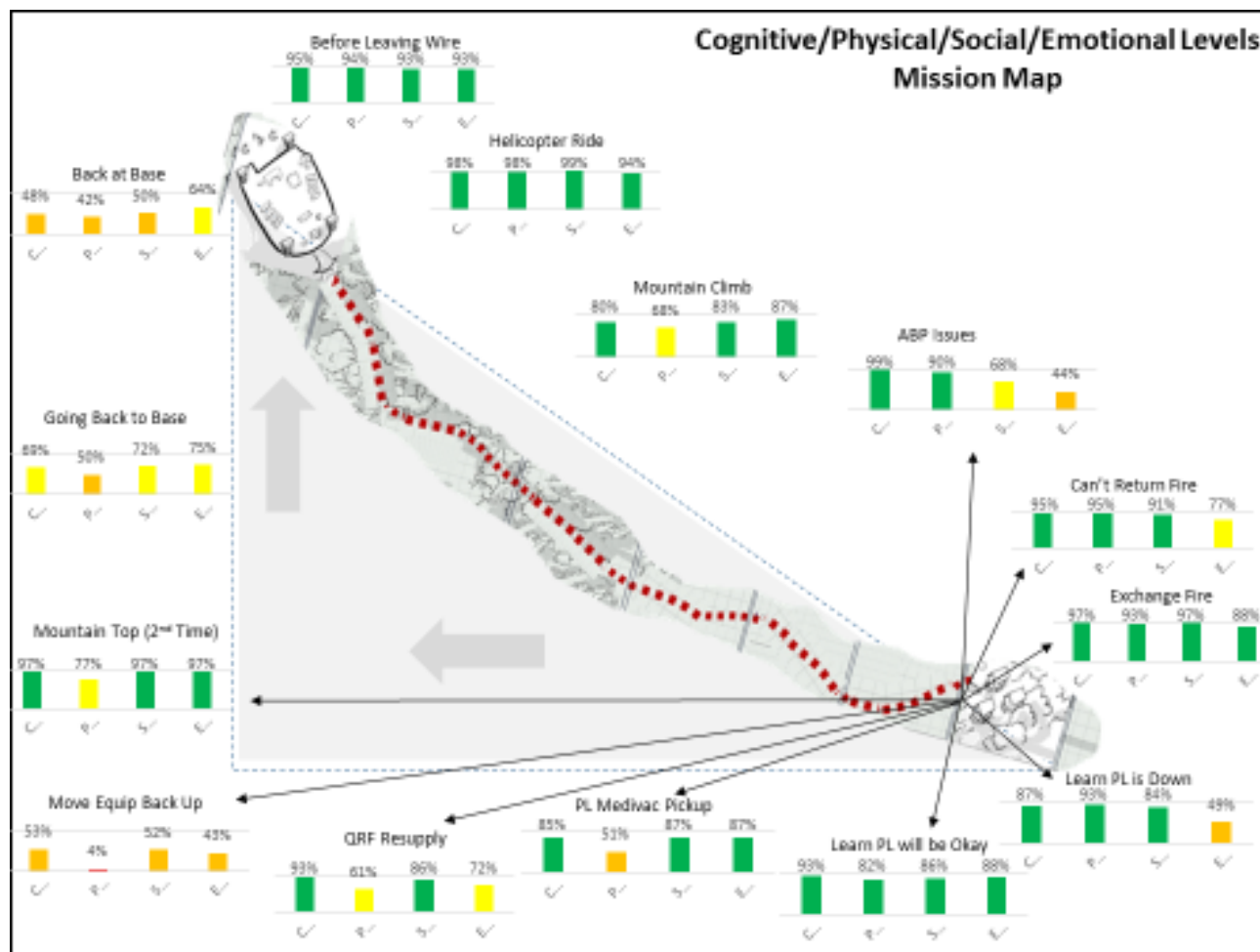
US ARMY
RDECOM



Study 1: Mission Interview Findings



CPSE “Gas Tank” Fluctuations During the Mission



*Note: This “Gas Tank” graph should be considered pilot data as it only represents a small sample (n=8), but it demonstrates a framework that may be used in future studies to better understand and predict CPSE fluctuations and interactions.

Soldiers described factors that depleted or replenished their resource capacity throughout the day.

These fluctuations are illustrated in these graphs. For example, Soldiers reported being close to “full” prior to leaving base camp. However, over time their physical resources were depleted during the mountain climb, followed by substantial depletion in social and emotional resources due to complicated interactions with ABP.

As the day went on, Soldiers recounted several other factors that depleted CPSE resources. They also described factors that restored these resources, such as learning that the PL found safety and would be okay after being shot.

In addition, experiences that Soldiers described often impacted one [CPSE] domain, which in turn affected another domain (e.g. social depletion affected emotional depletion).

By the end of the day, Soldiers’ “gas tanks” were progressively more depleted by tasks and levels were at the lowest when they returned to base camp. They explained that it wasn’t until returning to camp that they could consciously let go of maintaining CPSE for survival.



Soldiers' CPSE Influencers



Insight: Soldiers described many CPSE resources that they utilize or manage to meet demands in the context of squad-level operations. Examples that Soldiers described to “prepare” were generally more individual and inward-looking compared to the “post-mission” influencers, which were more social in nature.

PREPARE	DEPLETES	KSAs	TRAITS/ BEHAVIORS	RESTORE	POST-MISSION
Eat/Hydrate	Physical Exertion	Basic Training	Sense of Humor	Eat/Hydrate	Eat/Hydrate
Sleep	Cognitive Demands	Emotion Regulation	Service/Duty/Responsibility	Relax/Down time	Sleep
Mission Prep	Social Interactions	Adaptable/Flexible	Positive/Optimistic	Care for others, “checking-in”	AAR
Equipment Prep	Emotional Strains	Coping Ability	Mindful/Awareness	Socializing, Talking, Share Experiences	Clean Weapon
Mental Rehearsal	Weather	Attitude/Mindset	Team player	Adrenaline	Equipment Reset
Relax/Meditate	Hungry/Thirsty	Focus/Attention	Passion/ Sense of Purpose	Breathing Techniques	Hot Shower
Light Exercise	Someone Injured	Perseverance	Self-Motivation	Good Leadership	Watch Movies
Rituals/Superstition	Working with ABP	Problem Solver	Controlled Rage/ Aggressive	Positive Feedback, non-verbals; smiling thumbs up	Exercise/Workout
Listen to music	Waiting for PID	Intuition	Resilience/Grit	Taking Pack off	Recognition/Award
Email Family	Away from Family	Ability to Listen/Learn	Disconnect/Let go	Being “Relieved”	Personal Satisfaction

UNCLASSIFIED



US ARMY
RDECOM

Examples of CPSE Influencers



Mission Prep	battle drills, combined arms rehearsal, knowing where/when, bird #, briefing, GPS, grids, prepare for terrain, routes, sand table
Cognitive Demands	constantly watching back, maintaining SA, heightened senses, making decisions, changing plans, not knowing
Social Interactions	team member injured (not part of group), interact with ABP, frustration with teammates
Emotional Strains	team member injured (are they okay?), not able to help buddies, under fire waiting for PID, fellow Soldier not doing job, hearing others complain, away from home
Emotion Regulation	control aggression, control emotions, manage fear of uncertainty, ability to stay calm
Focus/Attention	heightened sense of awareness, SA, look for details, staying battle focused
Service/Duty	other peoples' lives in your hands, caring about mission, big picture idea kept in mind
Sense of Humor	laughing, light-heartedness, cracking jokes
Attitude/Mindset	no negativity/anger, optimism, happy person/positive attitude
Resilience/Grit	game gets tough/hard, resilience, drive on, no quit in self or in guys, remember quitting isn't an option

*Note: Verbatim examples from transcriptions

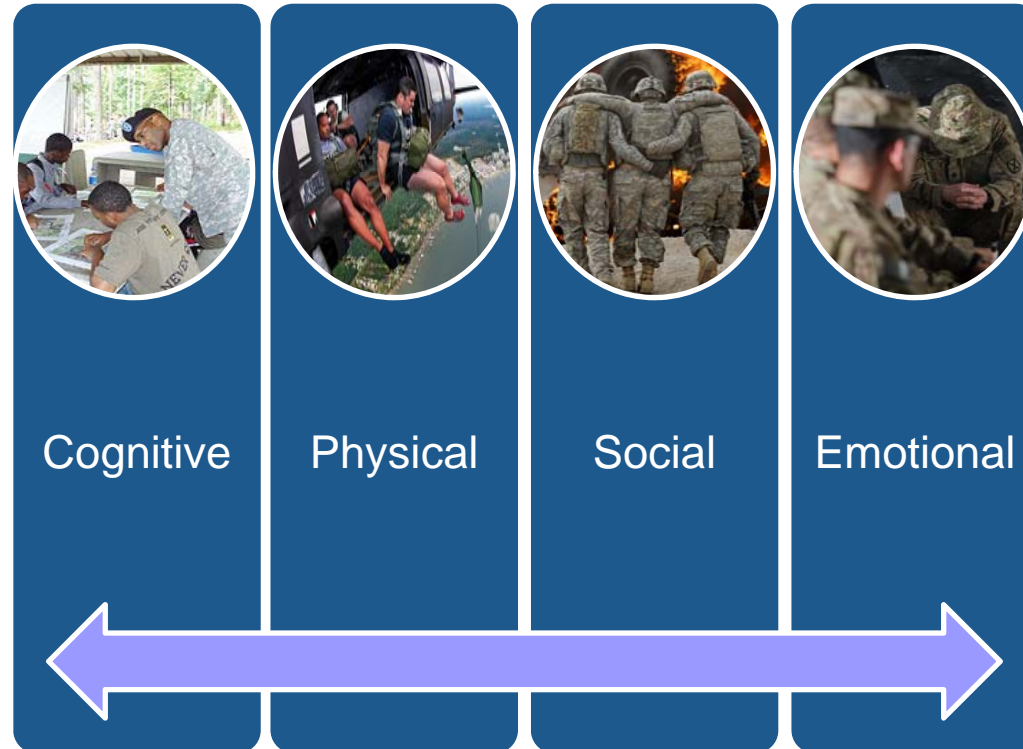


US ARMY
RDECOM

Possible CPSE Impacts



Soldiers described tasks and events during the mission that influenced CPSE resources that they perceived to deplete or restore their capacity to perform. Many of the experiences that Soldiers described impacted one domain, which in turn affected another domain (e.g. social depletion affected emotional depletion; physical restoration affected cognition restoration, etc.).



How does each domain impact another?

UNCLASSIFIED



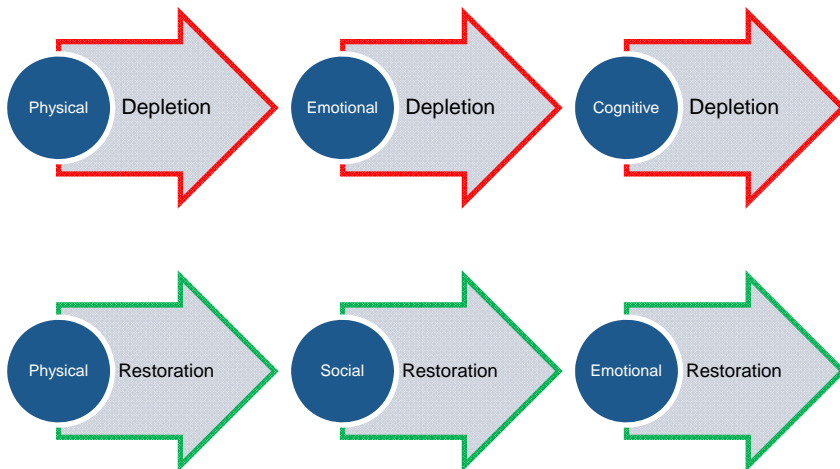
US ARMY
RDECOM

CPSE Interdependence



Insight: CP are often studied in conjunction to measure the influence that one has on the other. However, SE are often overlooked because it is not as easy to quantify. In the qualitative data, there were multiple instances of bi-directional influences to CPSE. This provides evidence that SE can have direct negative or positive implications on CP. Therefore, all four domains should be considered when studying performance.

Examples of CPSE influences on depletion or restoration:



"We are moving up the side of a hill and I hear everyone behind me huffing and puffing. I am huffing. The physical [depletion] creates that emotional non-readiness. Guys weren't ready for it emotionally or mentally prepared for it. It happens, a lot of guys get tired, feel sorry for themselves, and they start to forget what's going on around them."

"We heard that it was a gunshot wound to the leg and that he was going to be fine... put a tourniquet on the leg, bandaged it up a little bit and he'll be good for 8 hours. So he's in pain, but he's got a Fentanyl lollipop, so he'll be fine. So, once you hear that he's going to be okay and that they got him to the evac point, then morale and emotionally you go back up."

UNCLASSIFIED



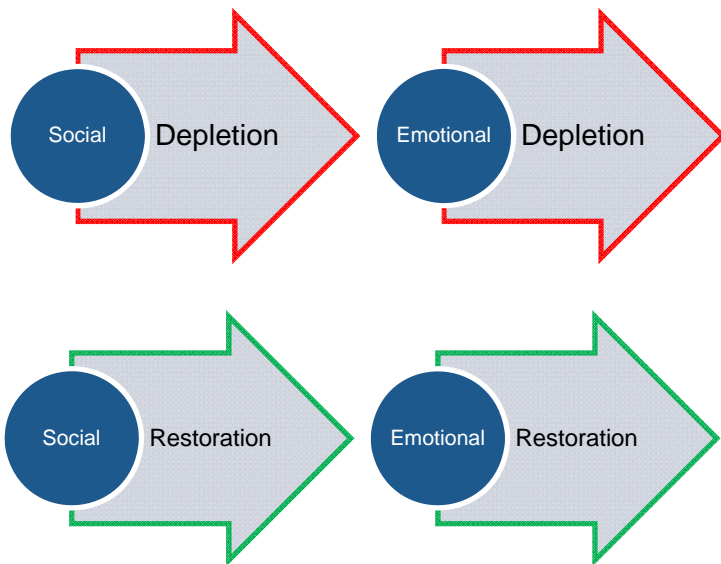
US ARMY
RDECOM

Relationship of SE Domains



Insight: Soldiers described how SE domains influence each other by depleting or restoring their resource capacity. These data indicate the importance and need for *why* S and E should both be studied in research frameworks to fully understand their implications on performance.

Examples of SE influences on depletion or restoration:



"Check your dudes, what team leaders do, they have all their equipment, pull security, pull security, pull security. I was a little emotionally, frustrated because that same Soldier [----] ran off again, he was hiding and he wasn't as aggressive as I thought he should've been. I had to specifically give out too much guidance to him versus control the whole team."

"Talk to them [Soldiers]. You spend all your time with them and when you spend even just a few weeks with somebody, 24/7, you learn their habits, you start learning more and more habits as time goes by and how different things affect them. You can differentiate when something's good and when something's bad."

UNCLASSIFIED



US ARMY
RDECOM



Study 1: Mission Interview Discussion



US ARMY
RDECOM

What can these findings inform?



- CPSE Measurement – This “Gas Tank” methodology can be utilized as a framework for future measurement to further understand the implications of Soldiers’ CPSE resource management through qualitative and quantitative data.
- KSAs/Traits/Behaviors – The identified attributes that Soldiers described can be utilized as a foundation for types of metrics in future assessments which can be applied to selection, training, and education.
- Specific KSAs/Traits/Behaviors can be targeted for cultivation and enhancement through training or practices aimed to build personal, professional, and team development.
- Identified CPSE influencers (e.g. prepare, depletes, restore) can be focus areas to implement strategies that can enhance or mitigate effects on performance.



US ARMY
RDECOM

Understanding CPSE Resources



Why is a holistic approach to readiness so important?

- Identifying and understanding the relationship of how all CPSE domains interact is critical to measure and monitor. This knowledge would provide status of Soldiers and areas that need modification.
- Increasing capacity at all CPSE levels would allow Army professionals to bring their abilities and skills to their full potential and to sustain high performance over time.
- Chronic stress without recovery to all CPSE levels depletes energy reserves, can lead to burnout and ultimately undermine the ability to perform optimally.

"It's [CPSE] a fluid thing. Picture when you are playing music and the treble, it keeps going up and down because there are different parts, you are using different things at different times. Let's say the bass is lower, it affects all the other ones at some point. It might be a minute but it's still affected."

-- 82nd Airborne Division, Fort Bragg, NC



US ARMY
RDECOM

CPSE are All Interconnected



“You know, the first thing you have to figure out is how combat physically affects you. Then from there, being able to tell people that. Like, your body will be flooded with adrenaline for hours and hours and hours which is something the human body’s not used to. It’s very taxing on you... So that everybody understands that you’re not weak, it’s not about some dudes are tougher than others. It’s part of the human condition. Returning from war is a difficult experience.”

-- 82nd Airborne Division, Fort Bragg, NC



US ARMY
RDECOM



Study 2a: Leadership Interviews



US ARMY
RDECOM

Study 2a: Objective



It is unclear how leaders perceive current training practices for readiness and what individual traits are required to sustain readiness conceptually and operationally. A better understanding of leaders' views will enhance the Army's ability to align its approach for readiness training programs and optimizing human performance.

- Objective 1: Understand current training practices that leaders utilize and the policies, programs, or training they have implemented within their unit to keep their soldiers “ready” with particular focus on the SE domains.
- Objective 2: Identify individual traits and behaviors that leaders believe are needed to uphold expected standards within the Profession of Arms.
- Objective 3: Understand how Soldiers interpret the meaning of Soldier Readiness.

*Also an objective in Study 1, will be discussed in the Conclusions section.



US ARMY
RDECOM

Study 2a: Method



In-depth interviews were conducted with active duty infantry NCOs and Officers with combat experience (n=9). An interview discussion guide was followed and sessions were audio-recorded and transcribed verbatim.

Examples of topics discussed:

- What actions are you currently taking to ensure your Soldiers are ready before they deploy?
- Have you ever participated in a training program that you would consider to support you or your Soldiers' mission readiness?
- If you received any training, have you "passed" this knowledge on?
- As a leader, are there social or emotional strategies you implement during your Soldiers' deployment to help them maintain their mission readiness (keep the tank full)?
- Where do you see the gaps and what would you like to see the Army do in the future?
- Are there actions that you take post deployment to help restore you or your Soldiers' readiness?



US ARMY
RDECOM

Study 2a: Analysis Approach



- The interview transcripts were managed and analyzed using Word and Excel 2013 (Microsoft) and NVivo 10 (QSR International).
- Data were organized in NVivo by topic area based on the research questions.
- Three researchers independently analyzed the data for each topic and identified insights (i.e., key takeaways or findings from the data).
- The researchers then integrated their findings and adjudicated any discrepancies in identification of insights.
- Direct quotes were utilized to illustrate major themes and insights with specific examples.
- The main focus of the analysis was to identify insights related to social and emotional readiness. More specifically:
 - How leadership practices influence Soldier readiness
 - What psychological states, traits, and processes are associated with social and emotional readiness



US ARMY
RDECOM



Study 2a: Leadership Interview Findings



US ARMY
RDECOM

Study 2a: Leadership Interviews



Findings were separated into three major themes with supporting insights:

Theme 1: SE Readiness Practices

Theme 2: How Leaders Pass Knowledge Down

Theme 3: Training Challenges, Gaps, and Recommendations



US ARMY
RDECOM

SE Readiness Practices



- Researchers identified four major insights related to SE readiness practices that will be discussed in the following slides.
 - Providing a Sense of Purpose
 - Recognizing Differences
 - An Individualized Approach
 - Importance of Mental Breaks
- Leaders gave several examples of the mitigation strategies and practices they use to help their Soldiers maintain their social and emotional readiness.
 - These practices are used not only to help Soldiers on an individual level, but also to foster a sense of trust and camaraderie amongst their Soldiers.
 - Many of these practices were either modeled after the behavior of their own leaders or were intuitively known to help maintain both their individual and their Soldiers' SE readiness.



US ARMY
RDECOM

Providing a Sense of Purpose



Insight: Leaders must provide their Soldiers with a sense of purpose. This is important because it fosters trust, motivates Soldiers to perform at their best, and ultimately impacts their social and emotional readiness by helping them understand and feel connected to the “bigger picture.”

“If we’re in downtown Baghdad and I tell a fighter team to break down this door and go into a room where there were just rifles pouring fire out of the windows of that room at us, they know they’re going to go into that room and there’s a very high likelihood one or two out of the four are going to get shot. If they don’t know why they’re doing that, they’re not going to want to do that. But if I’ve always made it a point to tell them why we do everything that we do then eventually they develop a super, super strong sense of trust in me because they understand, ‘hey he’s never told us to do anything that didn’t make sense.’ [Is that important for the Soldiers to understand why they’re there [Afghanistan]?] For readiness, it’s absolutely important. Vital, absolutely vital.”

“When we talked about missions we’re going to do, thinking, ‘God, this is stupid, this not how we should be doing it,’ that led to me as a platoon leader and I’m sure me reflecting it down to my Soldiers. We go out and it’s like, the question comes up: ‘why are we doing this?’ If I’m not able to give a good answer, that’s when I see the greatest threat of complacency and performance being degraded.”



US ARMY
RDECOM

Recognizing Differences



Insight: Leaders must help Soldiers recognize their capabilities and potential. They must also be aware of differences in personality and ability amongst their Soldiers. This knowledge should be used to shape how leaders approach their relationships with each Soldier.

“When I think of the Soldiers in my Company, it’s helping them recognize just, ‘you guys have so much capacity to perform.’ I don’t think they even know what they can do, you know?”

“He ended up being one of my best Soldiers I ever had... If leaders understand that each Soldier is different— every Soldier is absolutely different. I can’t talk to you and motivate you the same way I talk to her and motivate her because something makes either one of you tick differently. So I have to adjust my style of leadership to the individual Soldier, but at the same time, I’m still maintaining my level of professionalism and respect.”



US ARMY
RDECOM

An Individualized Approach



Insight: Understanding Soldiers on an individual level allows leaders to recognize potential dips in their Soldier's SE readiness and potentially avert problems.

"I'd say as leaders, you get a good read on everybody...I'm engaging everybody, just getting to look at their face, their demeanor, whether or not they're inputting anything or you know, if they're strung off in the back, just smoking, not paying attention and it's kind of an indicator to us, 'all right, hey, maybe we want to engage one-on-one, figure out if there is something that they need help dealing with or maybe that individual just needs time. Maybe we don't bring that individual next time, just give them a break. I need someone on radio guard, maybe it's going to be you this time,' so that way, they can get either their thoughts together or we can identify a problem."

"[When you saw that guy throw his helmet down, what did you do to help him?] Well, at the time, I talked to him because I don't know to what extent he was— I mean, he was clearly distraught, but is this guy going to kill himself or does he need to take a couple of breaths?... Having that individual awareness is very important. What's the trigger here? What's causing you to feel this way? Or like, what's been going on? And a lot of it, I knew, like 'hey, I know this has been a hard week. We got blown up. We were out all night,' or whatever the case was. So I recognize— I'm not pretending like that stuff doesn't matter when I'm talking to him like, 'I recognize that was a hard mission yesterday,' or 'this has been a hard week,' or, 'It's a hot day.' July in Iraq, no one's happy right now, you know? But, what's affecting this Soldier personally? That's knowing who he is."



US ARMY
RDECOM

Importance of Mental Breaks



Insight: Allowing Soldiers to have fun takes their mind off of things temporarily, providing them with a mental break or respite from the realities of a deployment and contributes to the group's camaraderie.

"Really, you're not supposed to be playing baseball in the middle of a firefight or in the middle of a compound in Afghanistan. You just have to understand that guys need that and let them, within constraints. We just want to make those things possible. What we do is dangerous stuff as it is... I think the best thing that leaders can do is just create that environment that it's okay. Just understand that guys need to blow off steam, even during deployment. In fact, probably the more steam they blow off during deployment, the better they'll be when they come home."

"[What are things that you would do to help them maintain their readiness?] The social and emotional... just trying to do things out of the norm, something fun or just something to bring them back like, 'hey, we're all a team'... My 2010 deployment I was fortunate enough that the Afghani base that our camp was located within had a soccer field so we coordinated with the Afghans to let us use the soccer field for the day and we had a football tournament. It was my Company and another Company, we just sat out and played football all day. Had the DFAC supply Gatorade and snacks and stuff. Just something kind of to remind people of home."

"How am I going to structure my day, for myself and for my Soldiers, so that we're hitting on all cylinders?... I tell my guys every day, 'there's no rule against having fun, you know?' To be able to pull a prank on somebody or just make jokes or whatever it is, is a part of that. I think, as we were talking about coping techniques, I think humor is a tremendous helper."



US ARMY
RDECOM

How Leaders Pass Knowledge Down



- Researchers identified two major insights related to how leaders pass knowledge down that will be discussed in the following slides.
 - Modeling Leadership Values
 - Knowing Your Soldiers
- SE knowledge is often passed down implicitly by leaders modeling the traits and behaviors they want their Soldiers to possess. Soldiers draw on the practices and good examples their leaders have set for them.
- Interviewed leaders emphasized that getting to know their Soldiers on an individual level is one of the most important ways to strengthen a unit and build SE readiness. The importance of this is something that had been passed down from their leaders.



US ARMY
RDECOM

Modeling Leadership Values



Insight: Leaders must exhibit the positive characteristics and behaviors that they wish their Soldiers to embody. This impacts their Soldiers not only while under their leadership but throughout their careers.

"I want them to envision me as someone that they want to be later on in their career."

"I can't fix the whole company at all, but if I target on that squad leader, and make him feel like he's part of the best team in the Army, then that's kind of like, hey, it trickles down and then trickles back up."

"By simply leading by example, Soldiers will learn what right or wrong looks like. The other factor is simply mentor them. As you train and counsel your Soldiers, you can show them their areas of strength and where there are opportunities to improve. You can mold a Soldier and guide them in the right direction so they can be a good and effective team leader. If you personally exhibit the three attributes of discipline, integrity, and problem solving then you are already mentoring your Soldiers. Soldiers respond best to leaders that lead by example. They will see what a good leader is and will want to aspire to be the same."

"What do I want to instill in him before I leave here that I want him to carry on to his 14th year?"



US ARMY
RDECOM

Knowing Your Soldiers



Insight: Knowing your Soldiers on an individual level is key to a unit's SE readiness. This is something they have learned by example.

"One of the things that I found very helpful that our battalion commander has introduced— I've never seen this before, but when he first took command, he gave all the officers a copy of his biography that he wrote. It's just like a page and a half where he discusses the usual stuff: 'I was born in this town. My parents did this and these are my siblings. I was married for this and these were my past assignments,' all that stuff. But, he also talked about himself, like as a person, talked about how he made decisions. He said, 'my approach to a lot of things is a little aggressive and sometimes that inhibits discussions. When I do that, I think people— I'm not shutting people out, that's just the way I present things. I expect and enjoy discussions and that kind of thing.' And, in turn, he had all of the officers write biographies about themselves, which not only helps him and each other understand ourselves, but the exercise itself forced a lot of folks - I know it did me - articulate and understand who they are, what's important to you, how you think."

"Well, it starts off, in my own personal example, I'm a firm believer that whoever your supervisor is, is hugely influential on the way that you, in turn, approach leadership. Not necessarily an exact copy, but you definitely draw a lot of techniques, lessons, mannerisms from those individuals. But, I do counsel all my subordinates. I sit down with them when they first come on board or when I first showed up. I sat down with each one of them for an hour and a half, two hours talking about, among other things, knowing your soldiers, knowing your immediate subordinates, knowing their subordinates."

"Just seeing it, just seeing it. And then honestly, me just having good leaders that have taught me and then me teaching my subordinate leaders how to identify issues and stuff. I mean, we do get training on it, the leaders do. They go through all these NCOES courses where they get a touch of training on things, but not necessarily subject matter experts."



US ARMY
RDECOM

Training Challenges, Gaps, and Recommendations



- Researchers identified three major insights related to training that will be discussed in the following slides.
 - Training Challenges
 - Training Gaps
 - Training Recommendations
- Leaders believe that due to societal changes, Soldiers currently entering the Army may have different strengths and weaknesses (CPSE foundations) than prior generations of Soldiers.
- Training for the sake of training will not suffice. Programs of instruction (POI) must be designed for optimal learning and retention.



US ARMY
RDECOM

Training Challenges



Insight: Leaders described newer Army recruits as being less physically and emotionally ready than previous generations. Group training that is physically and emotionally taxing is key to preparing Soldiers.

"With today's age, I think that people when they're coming in are a little bit more physically and mentally weak; their competency level isn't as high and I think the Army focuses on the big picture and not the individual. I think right now, we need more individual training, education, more resiliency training. More classes, really, rather than always being out in the field."

"So when you go there, you get kind of like a shared hardship... the fact that you're all engaging in this mutual suck factor as it's been called, brings people closer together. And then after JRTC you've got a tighter team as a result."

"[What's changed?] Well, the type of Soldier. Just, up front. The type of Soldier. It really has. Because some guys, they come into the Army with the mindset that 'oh I don't have to do this, I don't have to do that.' When in reality, 'well actually, yeah, you do.' You joined the Army, that's the way it is. Yes, you do have to. But the difference is now you're not allowed to do physically corrective action. It's not allowed anymore. Like more than ten pushups would-- If I made a Soldier do eleven pushups today, that could ruin my career."



US ARMY
RDECOM

Training Gaps in Primary vs. Secondary Skills



Insight: The Army does not necessarily place equal value across all the readiness domains (CPSE). Specific Army programs designed to address building a Soldier's SE readiness were not easy for the leaders to identify. SE readiness is not something that is "scored" like physical fitness or marksmanship, making it harder to assess.

"I mean, it's just where do people put their emphasis? Where do leaders put their emphasis? If we're talking the emotional training and stuff, it's just getting people to understand this is as important as getting people to go to the range and the emphasis they put on qualifying with the weapon system as teaching guys how to handle their emotional stress."

"I guess the first gap would be potentially in the way we select leaders. We need to put more emphasis during our development of leaders and our selection of leaders on the social bucket, the social abilities. Because I think that is kind of the beginning of everything else. Having leaders who are empathetic and compassionate and care is a necessary state to exist for the rest of it to work out, for the emotional health of the unit to be there, because I don't think that there's a lot of that emphasized right now as far as the leadership training goes. And that's a gap that I see."

"Unfortunately, I can't chapter a guy out of the Army because he's 'unresilient' because that would curb the issue of, 'let's wait until he gets a DUI, you know?' I mean, we're not waiting until he gets a DUI, but you've now clearly displayed an inability to cope, an inability to rehabilitate because of this event. It shouldn't have to come to that."



US ARMY
RDECOM

Training Recommendations



Insight: Although the leaders interviewed believe that SE training is key to a Soldier's overall readiness, they indicated that the Army's current approach for providing these types of training is not always ideal. Specifically, the train-the-trainer method or use of PowerPoint presentations is not always optimal for preparing Soldiers to cope with the hardships they may encounter during a deployment.

"And we have a brigade MRT rep. I know him and I sat through one of his slide shows. Every Soldier when we sit down gets this MRT brief. I'm like, 'all right, all right, can we go now?' Actually, it's funny because the tasking came out in a frag order this morning. We have to do this MRT training because it's part of 350-1 Army regulation. You have to do this every quarter. That's not the right way to do it at all."

"Just about everything that I've seen... the Army has washed it out and lost a lot of efficacy, to include MRT training. Like I said, the concept is not bad but the way it's employed...the delivery is absolutely terrible."

"No, so, emotional is very, very, very hard to train because the way that we do it, and I don't know what better way to do it. It's training, like we use PowerPoint and stuff like that. And that's just not the best way."



US ARMY
RDECOM



Study 2a: Leadership Interview Discussion



US ARMY
RDECOM

Study 2a: Discussion



- Many leaders explained that they adopted valuable habits and strategies from leaders who they considered role models. However, there was no formal training or other education for this type of learning; they simply mirrored what resonated most from each leader.
- Leaders believed that SE training is just as critical as CP training for maintaining Soldier readiness during a deployment since CPSE are not only interconnected but interdependent. If one aspect of readiness is depleted, the other domains may be impacted. Therefore, it is equally important to train SE readiness skills alongside CP competencies.
- The challenges that leaders described for training CPSE competencies included time, resources, availability, and “other duties as assigned” drifting away from their original mission.



US ARMY
RDECOM



Study 2b: Leadership Essays



US ARMY
RDECOM

Study 2b: Objective and Method



- Objective: Determine what knowledge, skills, abilities (KSAs), traits, and behaviors Soldiers believe are critical to effective leadership at the squad and team leader levels
- Researchers obtained essays (n=84) that were assigned as part of a leadership training exercise at Fort Bragg, NC in which platoon, squad, and team leaders from the 82nd Airborne Division were asked by battalion-led facilitators to write about:
 - Essential traits and “what it takes” to be an effective squad leader, team leader, or paratrooper in an infantry regiment
 - How to instill those KSAs, traits, and behaviors



US ARMY
RDECOM

Study 2b: Analysis Approach



- The essays were managed and analyzed on hard copies and in Excel 2013 (Microsoft).
- Three researchers independently coded the essays based on the research questions.
- The researchers then integrated their findings and adjudicated any discrepancies in identification of insights.
- The KSAs, traits, and behaviors that Soldiers identified as critical to effective leadership were organized into fifteen distinct categories.
- Similar categories were consolidated under seven major themes that highlight the requirements for effective leadership.
- Direct quotes were utilized to illustrate major themes and insights with specific examples.
- Themes include KSAs and/or traits needed to advance to the next level of leadership (e.g., from paratrooper to team leader or team leader to squad leader).



US ARMY
RDECOM



Study 2b: Leadership Essay Findings



US ARMY
RDECOM

Study 2b: Leadership Essays



Major Themes:

1. Be a mentor and teacher
2. Understand emotions of self and others
3. Embody the Army Values (LDRSHIP)
 - Loyalty, **D**uty, **R**espect, **S**elfless Service, **H**onor, **I**ntegrity, **P**ersonal Courage
4. Be driven and motivate Soldiers
5. Be prepared to perform
6. Be confident and courageous
7. Be resilient



US ARMY
RDECOM

Be a Mentor and Teacher



Insight: Effective leaders must lead by example and be a mentor for their Soldiers both on and off duty. They must be able to identify their Soldiers' weaknesses and train them on essential skills and enable behaviors/activities that promote group cohesion and camaraderie.

Top KSAs/Traits/Behaviors Described by Soldiers related to this theme:

- teacher, coach, mentor, role model, counselor
- builds morale, cohesion, and camaraderie
- interpersonal skills, approachable, conflict resolution skills

"Being a role model is having the discipline to lead by example and practice what you preach. Leaders lead from the front by setting the example and adhering to the standards that all Soldiers are expected to follow."

"Developing camaraderie amongst a team can be difficult and often takes a long period of time. Once camaraderie is developed, however, the team becomes tighter, stronger, and very effective at completing tasks. Camaraderie isn't just developed overnight, it requires experience and trust. One way to help boost camaraderie is to simply spend time with your Soldiers. I try to spend as much time as I can with my Soldiers, both during work and outside of work. If my Soldiers are stuck with a terrible task, I will be right next to them dealing with the same obstacles. At the same time, I am there outside of work enjoying a plethora of recreational activities that focus on team building or resetting our mindsets so that we will be effective the next day."

"A leader must be able to assess his men in their weak points as well as make them better at their strong points. Whether it be basic rifle marksmanship or executing battle drills, a team leader must train his men up to obtain proficiency."



US ARMY
RDECOM

Understand Emotions of Self and Others



Insight: Effective leaders must be self-aware and in control of their emotions. They must also have the capacity to empathize with how their Soldiers are feeling and what they are experiencing.

Top KSAs/Traits/Behaviors Described by Soldiers related to this theme:

- compassion, supportive, empathy
- self-aware, patient, calm, emotionally stable, present

"Empathy is an attribute that I think is often overlooked. By the time leaders get in their positions, they often forget what it was like to be new or their issues are viewed differently than that of a new guy. Being able to understand where your Soldiers are coming from, whether it's injuries, work-related issues, or personal issues goes a long way in developing trust amongst a team and squad."

"Emotional stability especially as a combat leader directly leading Soldiers is vital to being a combat leader. A leader must keep his emotions under control in any circumstance despite any level of stress. Without this emotional stability, the leader is unable to make correct and timely decisions vital to mission success and [risks] the safety of his subordinates. Emotional stability is also necessary when leading off the battlefield and is required when dealing with subordinates' personal and social problems that affect both the leader and his Soldiers."

"I think being self-aware is also crucially important. Knowing one's own shortcomings can help with overall readiness because you won't be wasting time trying to accomplish a task that you either have never done before or just don't have the capability to accomplish. You can ask for guidance and be able to complete the task and once you accomplish the given task you can show your men how to do it as well."



US ARMY
RDECOM

Embody the Army Values (LDRSHIP)



Insight: Effective leaders must embody the Army values (LDRSHIP). They must hold themselves to a high moral standard, put their Soldiers' needs above their own, and be able to admit when they are wrong.

Top KSAs/Traits/Behaviors Described by Soldiers related to this theme:

- loyalty, integrity, accountable, ethical, fair, moral
- humble, admit weaknesses, respond positively to criticism

"Perhaps the most important to me is integrity. It is the Army Value I hold in the highest regard and I believe it encompasses almost everything. Simply put, do the right thing. Soldiers should never be able to use a leader as an excuse as to why they are doing something wrong. A leader should set the example that others want to follow."

"What I look for most and expect from my team leaders is for them to serve as 'servant leaders.' The needs of the Soldier should always come before their own needs. By doing this, my team leaders earn the trust, loyalty, and confidence of their Soldiers, which aids in the complete success of the goals of the organization we serve in as well as developing their Soldiers to become servant leaders as well, with the same attributes and competencies."

"As a team leader, you're going to make mistakes. The key is to learn from your mistakes and to always drive on. If you always look out for your Soldiers and learn from your mistakes, you will be on track to becoming a great leader."

"A team leader needs to be able to respond positively to criticism. He cannot take criticism personally and must use that feedback in a constructive way."



US ARMY
RDECOM

Be Driven and Motivate Soldiers



Insight: Effective leaders must not only possess the inner drive to succeed, they must also inspire and provide motivation to their Soldiers.

Top KSAs/Traits/Behaviors
Described by Soldiers related
to this theme:

- driven, self-starter, motivated
- positive, inspiring, passionate, vision

“As a team leader, you must have the drive to always push yourself and your team to be the best in everything you do.”

“A good leader encourages the team to perform to their optimum all the time and drives organizational success.”

“It is easy to issue out orders and to yell to get things done, but the problem with that is that you will only get the bare basics from your men. A leader must bond with and inspire his men for them to excel at any given challenge.”

“Passion... is defined as being a strong and barely controllable emotion. Can you imagine a fighting force of passionate Soldiers who strive to be professionals in fields of expertise and basic soldiering with such a strength? We would truly be unstoppable.”



US ARMY
RDECOM

Be Prepared to Perform



Insight: Effective leaders must be ready to perform at a moment's notice and be prepared to engage in challenging situations that require creative thinking and strong problem solving skills. In addition to their intellectual capacity, they must also be able to meet the physical requirements of their missions.

Top KSAs/Traits/Behaviors Described by Soldiers related to this theme:

- smart, technically proficient, intelligent
- creative thinker, resourceful, problem solver, adaptable
- physically fit

"Being tactically proficient will enable you to perform your duties as a leader to the fullest extent without question and will help you in gaining the trust of your Soldiers and superiors in all tasks that need to be completed. Being technically proficient is the ability to teach others your knowledge and duty position."

"The most important attribute to have as a team leader is to be a problem solver. This applies to all leadership in the military. No matter what you do in this job, you will run into road blocks. Far too often, I have seen individuals not complete a task because it's easier to give reasons why they couldn't get it done rather than taking the harder route, figuring it out, and completing the task at hand. In the Army, more often than not, we do something called 'being baptized in the fire.' That's where you are put in a position that you don't truly understand all the tasking and responsibilities that come with that job until you are actually doing it. This is where being a problem solver is such a key element. With being a leader in the Army, you will not always have someone right there to show you how to complete a task or you don't always have someone showing you how to do their job before you replace them. You need to be able to figure things out on your own, be a problem solver, and when you hit a road block, find a way through it so you can complete your mission."



US ARMY
RDECOM

Be Confident and Courageous



Insight: Effective leaders must be confident in their ability to accomplish their missions. Additionally, assertive leaders can confidently provide guidance and assurance to their Soldiers, which helps foster trust amongst the group. Soldiers believe in leaders who believe in themselves.

Top KSAs/Traits/Behaviors Described by Soldiers related to this theme:

- confident, self-assured, assertive
- courage, fearless, toughness, dominance

"I expect my team leaders to be confident in the tasks they are given and be able to control his team when plans don't go as expected."

"Airborne squad leaders are confident in front of their men. They accept that they are a senior leader within the platoon and set the example personally and professionally for subordinates."

"The most important qualities... pertaining to a combat leader are certainly confidence and resilience. If a team leader is not confident in his actions on the battlefield, then his Soldiers will not be either."

"When I think of personal courage, I think about how someone will act when there is a possibility of failure. If someone lacks courage and is given a task and there is a chance to fail, whether it be not meeting a time standard or completing the task altogether, they may be less likely to try their hardest and fail anyway. If you give that same task to a Soldier who has courage, they won't be afraid to fail. That Soldier might also fail, but they will learn from it and even though they failed the first time they won't be afraid to try again and again until they succeed."



US ARMY
RDECOM

Be Resilient



Insight: Effective leaders must have the “mental fitness” to persevere and remain focused on mission accomplishment throughout any and all adversities.

Top KSAs/Traits/Behaviors
Described by Soldiers related
to this theme:

- resilient, hardy, fortitude, steadfast

“It is up to us as leaders to prioritize and assure that the task or mission is completed before anything else. We will never accept defeat by always giving 100% in everything we do as Soldiers and as leaders even in the face of adversity. We will never quit if the task or mission gets tough. We will find a way to overcome the adversity and fight back to gain the advantage.”

“With mental readiness, it simply comes down to being focused and having the ability to adapt and overcome a situation. That means always being aware of the situation as well as being prepared enough to still focus on the task at hand.”

“Many things are required in our job, but few are as needed as resilience for a paratrooper. Mental and physical resilience, both are a necessity. By nature, this profession requires a moment’s notice to be ready. However, no matter how much we plan and prepare, there is always the unknown situation that may arise. We may be exhausted, we may be drained, but in that moment it will be required to persevere and push through. That is why resilience holds, in my opinion, such importance for a paratrooper.”



US ARMY
RDECOM



Study 2b: Leadership Essay Discussion



US ARMY
RDECOM

Study 2b: Discussion



- Leaders should be mentors and teachers who embody the Army Values and provide their Soldiers with the motivation and drive to succeed.
- Leaders should encourage behaviors and activities that promote group cohesion and camaraderie.
- Leaders must be self-aware and have the capacity to empathize with their Soldiers' emotions and experiences.
- Leaders must be resilient and confident in their abilities to accomplish their missions.
- The findings from these essays further validate the KSAs, traits, and behaviors critical to Soldier Readiness identified in Studies 1 and 2a.
- These KSAs, traits, and behaviors were utilized in conjunction with those found in Studies 1 and 2a to develop and populate the Taxonomy.



US ARMY
RDECOM



Research Products



US ARMY
RDECOM

Research Products



The data and findings from Studies 1, 2a, and 2b were synthesized to generate the following research products:

- Taxonomy based on the major themes revealed by Soldiers as being critical to SE Readiness.
- Social Network Analysis (SNA) from focus areas within Taxonomy to establish the SE research landscape over the past 10 years and identify the top researchers in these fields.



US ARMY
RDECOM



Taxonomy



US ARMY
RDECOM

Taxonomy



How did we develop the taxonomy?

- Eight major themes emerged from gathering Soldiers' perspectives from Study 1: Mission Interviews, Study 2a: Leadership Interviews, and Study 2b: Leadership Essays.
- The criteria for a topic to be considered as a major theme was determined by the existence of verbatim responses related to the theme (either implicitly or explicitly) in at least two of the studies.
- These themes were selected as focus areas for the final Social Network Analysis (SNA).



US ARMY
RDECOM

Taxonomy



Major Themes:

1. Prosocial Behavior
2. Emotion Regulation
3. Group Cohesion
4. Sensation Seeking
5. Self-Efficacy
6. Moral Character
7. Resilience
8. Mentoring



US ARMY
RDECOM

Prosocial Behavior



Prosocial Behavior, or “voluntary behavior intended to benefit another,” is a social behavior (e.g. helping, sharing, donating, cooperating, and volunteering) that “benefit[s] other people or society as a whole.” These actions may be motivated by empathy and by concern about the welfare and rights of others, as well as for egoistic or practical concerns, such as one's social status or reputation, hope for direct or indirect reciprocity, or adherence to one's perceived system of fairness.

Top 5 KSAs/Traits/Behaviors

Described by Soldiers related to Prosocial Behavior

1. Empathy
2. Compassion
3. Supportive
4. Genuine Care for Peers
5. Emotional Intelligence

“I believe that leadership is a personal trait. Like, you have to have empathy and compassion to be a leader... so understanding how people think and being able to put yourself in someone else’s shoes.”

“They got stuck down there and we weren’t able to call medivac or anything. He was probably stuck down there over an hour. Maybe an hour and a half after getting shot, so it kind of sucked. We felt helpless up here [mountain ridgeline] because we couldn’t do anything.”

“To leave the wire for me, it’s always been... you have your brothers... and it’s weird to talk about it, but it’s always displayed with the mindset that we leave the wire as brothers.”

“Being able to tell the difference between who’s going to be successful and who’s not, I would say that a guy motivated by a deep intrinsic value about what he’s doing. In our profession, believing in servanthood, believing in taking care of your Soldiers, and it’s not about you, and all that stuff. That seems a better guarantee of a guy being successful, at least in the long run than when it’s just about him.”



US ARMY
RDECOM

Emotion Regulation



Emotion Regulation is the ability to respond to the ongoing demands of experience with the range of emotions in a manner that is socially tolerable and sufficiently flexible to permit spontaneous reactions as well as the ability to delay spontaneous reactions as needed. Emotional regulation is a complex process that involves initiating, inhibiting, or modulating one's state or behavior in a given situation.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Emotion Regulation

1. Focus/Attention
2. Being Present
3. Preparing Self/Mental Rehearsal
4. Self-Awareness
5. Patience

"It was hard because we all wanted to go down there and help, but we couldn't because we had to keep the mission in focus... We all heard that the PL got shot and it was instinct that you want to go help, but in training, you got to have that discipline to stay."

"Guys weren't ready for it emotionally or mentally prepared for it. It happens, a lot, guys get tired, feeling sorry for themselves, and they start to forget what's going on around them. The more you are physically fatigued, the less you are able to pay attention to what you need to do."

"When you get in the truck and leave the wire, I never thought about, 'I'm going to get blown up today.' That takes your attention away from what you need to be paying attention to. For me, if it's useful in terms of my operational environment at that moment and what I need to be paying attention to, 'we are approaching checkpoint 34 and this route's black and it's been blown up every single day and that's why it's black,' I have to have a heightened sense of awareness as a gunner scanning for IEDs, or on a foot patrol that at that moment-- although I am doing it the whole route."

"Your mind is working, you are thinking of scenarios of what might happen, and what you might do when that happens."

"Breath practice and meditation helps you emotionally, so if you've practiced them in a soft environment, when the rubber meets the road, when you are getting shot at in combat missions, they help you with these other two aspects, cognitive and physical."

UNCLASSIFIED



US ARMY
RDECOM

Group Cohesion



Group Cohesion, or social cohesion, arises when bonds link members of a social group to one another and to the group as a whole. Although cohesion is a multi-faceted process, it can be broken down into four main components: social relations, task relations, perceived unity, and emotions. Members of strongly cohesive groups are more inclined to participate readily and to stay with the group.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Group Cohesion

1. Builds Camaraderie/Esprit de Corps
2. Builds Trust
3. Ability to Follow Orders
4. Team Player
5. Conflict Resolution Skills

"Developing camaraderie amongst a team can be difficult, and often takes a long period of time... Once camaraderie is developed, however, the team becomes tighter, stronger, and very effective at completing tasks. Camaraderie isn't just developed overnight, it requires experience and trust. One way to help boost camaraderie is to simply spend time with your Soldiers."

"They have to trust the individuals to the left and right, so I think with the cognitive decision-making process, they're going to take less time to make that decision because they don't have to over-analyze the variables because there's that trust between the individuals."

"In the Army, I learned early on that in order to lead you have to know how to follow. You can't expect someone to do what you say if you aren't willing to do it yourself. They are little things, trivial things, but they are the rules and you have to follow them. So if you can't follow simple rules, how am I going to trust you when I tell you to go and take an objective or go set up a fire position? It's that trust you place on someone that they will do what you tell them to do... Our job in particular, there is no room for second guessing, no room to question. Because that second of hesitation could cost someone their lives."

"Soldier readiness is when we leave the wire you have the ability that we have to have, that ability equals our survivability, the willingness is that well, I really don't want to hike that mountain, but I am willing because it's not about me, it's about the guy to the left and right of me who will do the same thing, so for me to be qualified to be his team mate, I need to do what I need to do."



US ARMY
RDECOM

Sensation Seeking



Sensation Seeking is a personality trait defined by the search for experiences and feelings that are “varied, novel, complex and intense,” and by the readiness to “take physical, social, legal, and financial risks for the sake of such experiences.” Risk is not an essential part of the trait, as many activities associated with it are not risky. However, risk may be ignored, tolerated, or minimized and may even be considered to add to the excitement of the activity.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Sensation Seeking

1. Fearless/Risk-Taker
2. Courageous
3. Aggressiveness/Toughness
4. Dominance/Sense of Power
5. Ability to Operate at High-Tempo

“We were told we were flying straight there. We found out afterwards, like after we were on the ground, when it came over the radio. So, if we hit an IED, there’s nothing I’m going to do about it. I mean, if it happens, it’s the nature of the game.”

“I feel like if you’re not aggressive in your very nature, then when you’re in a two-way gun fight and conscious thought goes immediately out the window cause it’s the absolute first thing you lose - conscious thought - and you immediately go in to fight or flight. Everyone does. It’s guaranteed it’s going to happen. If your nature in and of itself is not aggressive then flight is going to kick in and not fight. And that hesitation, that half a second it takes you to get back into reality, is the half a second that that guy pulled the trigger before you.”

“Being infantry we want to do our job, we like firefights I guess, just for the action part of it. We know it’s dangerous but it’s kind of like an adrenaline rush kind of thing. And since it was his first deployment I knew he wanted to do something, so I told him if stuff went down, I would send him to go post up on the rock, get in the fight, and pull security.”

“Getting in a firefight, you start noticing everything. Everything is moving. You become more aware of what you are looking at. Because you have to keep moving your head on the mountain to make sure nothing is up there, nothing is forward.”



US ARMY
RDECOM

Self-Efficacy



Self-Efficacy, or personal efficacy, is confidence in one's own ability to achieve intended results. Self-efficacy affects every area of human endeavor. By determining the beliefs a person holds regarding his or her power to affect situations, it strongly influences both the power a person actually has to face challenges competently and the choices a person is most likely to make.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Self-Efficacy

1. Confident
2. Self-assured
3. Assertive
4. Motivated
5. Intuitive

"Confidence is important because without it, there is no trust and a team will fall apart. A leader needs to have confidence in his Soldiers to accomplish a task effectively. Just as well, a Soldier needs to have confidence in his leadership to direct, guide, and mentor him. Confidence can be defined as the belief in one's powers and abilities. How then does one without confidence in his leadership or confidence in himself become an effective leader? He simply can't because tasks will not be completed smoothly or effectively. This can create unease amongst a team. An effective team and an effective team leader needs to be just that, effective. Without confidence, heart, and camaraderie, a team is nothing but a group of Soldiers that work together. When all three of these attributes and qualities that follow come together as a team, a sense of belonging manifests. The combination of these traits allows a team to be unstoppable."

"Okay, cognitive, personally I was pretty close to full. I knew what was going on and was pretty confident in what I was supposed to be doing. So I am going to say full [gas tank]."

"Self assurance or confidence is the final trait. Confidence is necessary to the success of all the other traits. Self-assurance as a leader is necessary because they must be confident in themselves and the decisions that they make on an individual and daily basis."

"I kind of knew what was coming up and since I had already been deployed, you can kind of judge, you can have a feeling. You have a feeling when you know something is not right or you know how to be aware of your surroundings."

UNCLASSIFIED



US ARMY
RDECOM

Moral Character



Moral character primarily refers to the assemblage of qualities that distinguish one individual from another, although on a cultural level, the set of moral behaviors to which a social group adheres can be said to unite and define it culturally as distinct from others.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Moral Character

1. Passion
2. Serving Others
3. Integrity
4. Respect
5. Loyal

"Heart is the cornerstone of the Army in my opinion, whether the passion is towards the defense of our country, or towards the welfare of one's Soldiers. Heart contributes towards the bettering of one's self and dedication to his cause."

"I think service is a huge value, in the Army and in every echelon within the Army. It's all about serving others. I serve my superiors. I serve my subordinates to make sure they have what they need to accomplish their tasks, their missions, their objectives to meet the intent. We serve – my organization, my company serves other companies. So, it's an individual and collective value of service."

"Finally, and perhaps the most important to me, is integrity. It is the Army Value I hold in the highest regard and I believe it encompasses almost everything. Simply put, do the right thing. A leader should set the example that others want to follow."

"My most important values are loyalty, respect, and integrity. Loyalty is obviously important because you need your Soldiers to have a willingness to follow you. You also need to be sure that they will always follow you no matter what the circumstances. You gain their loyalty by gaining their respect."



US ARMY
RDECOM

Resilience



Resilience, specifically psychological resilience, is defined as an individual's ability to successfully adapt to life tasks in the face of social disadvantage or highly adverse conditions. Adversity and stress can come in the shape of family or relationship problems, health problems, or workplace and financial worries, among others.

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Resilience

1. Mental Fortitude/Discipline
2. Positive Attitude
3. Adaptability/Flexibility
4. Problem solver
5. Sense of Purpose

"Well, basically, when you're training, when you're walking long miles and you've been up all night, and you still have to push to get to the objective. That's when that discipline kicks in.. you just don't feel sorry for yourself. Keep your head up... having that mental fortitude to just push through it."

"Positivity is necessary for a leader because he must constantly monitor the morale of his Soldiers. Positivity and success are the engine that drives all unit success. Negativity and low morale will destroy the success of a unit and a leader must constantly fight against it by encouraging a positive environment that breeds high morale."

"You have to be able to be flexible, what they teach us back here is a baseline for a general situation and general mission. Once you get down to a specific mission, you have to be flexible and maybe change up if you need to, to fit the particular mission. So it's that ability to change to the situation, to be able to cope."

"Any type of development of the mind is going to make you-- I mean the mind's a muscle. If you don't use it, it just goes 'pfft.' I don't want to say it dies off, but just like any muscle, if you don't work it out, it's not going to become any stronger... The simple act of learning something new and more engaging that challenges a Soldier's mind is going to make him a better mental thinker, is going to help him develop problem-solving which is a big thing in the military."



US ARMY
RDECOM

Mentoring



Mentoring is a process for the informal transmission of knowledge, social capital, and the psychosocial support perceived by the recipient as relevant to work, career, or professional development. Mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé).

Top 5 KSAs/Traits/Behaviors Described by Soldiers related to Mentoring

1. Leads by Example (Implicit)
2. Ability to Translate Knowledge into Hands-on Experience (Explicit)
3. Interpersonal Skills
4. Selfless
5. Humility

"By simply leading by example, Soldiers will learn what right or wrong looks like. The other factor is simply mentor them. As you train and counsel your Soldiers, you can show them their areas of strength and where there are opportunities to improve. Soldiers respond best to leaders that lead by example."

"The greatest gift a Team Leader can give to his Soldiers is the skill, knowledge, and attributes needed to fulfill the responsibilities and duties to be a leader. Someday our Soldiers will grow to become the Team Leader they idolized. It is our job to ensure they have the skills needed to not only survive but thrive in the unit."

"Communication might be the most important part... Leaders need to communicate with those above him to get all the information needed. They must also keep their Soldiers up-to-date with all tasks and duties put down."

"Mentorship is literally nothing more than discussion and how you approach issues that can be from the smallest to the largest issue. Like sitting the dude down and saying, 'Okay, I realize you were late three times last week. What's going on? Is there something right now in your life that's affecting your ability to sleep?' You never know. He could be like, 'my mom back home is sick.'"

"Mentorship is putting my Soldiers needs above my own. I must make sure I am helping them attain their greatest potential in order to bring them through the ranks."

UNCLASSIFIED



US ARMY
RDECOM



Social Network Analysis (SNA)



US ARMY
RDECOM

SNA Objectives



- Objective 1: Baseline the level of scientific activity for each topic to identify the breadth and depth of research being conducted across industry, academia, and government.
- Objective 2: Identify the leading researchers for each topic who might serve as subject matter experts and entry points into the broader social-emotional research community.



US ARMY
RDECOM

SNA Method



- Search terms were constructed for each topic and refined by the study team to generate data that were appropriately focused.
- Searches were run manually for Web of Science and results were exported as BibTeX-formatted text files.
- DTIC searches were run using an automated web-scraper custom-developed for this project using the Python programming language.
- Searches covered publications released from 2007 through 2016.
- Data from the two sources were merged, cleaned, and prepared for network analysis. The SNA itself was conducted using the igraph package for the R statistical computing environment.



US ARMY
RDECOM

SNA Results



The results of the SNA provide an overview of the research landscape for each of the eight topic areas identified in the Taxonomy.

- The first section of the report looks across topics, presenting comparisons of the relative amount of research activity, as measured by publication rates and the number of scientists engaged in producing research. The purpose of this section is to identify which topics are particularly active, and which are attracting less attention from the scientific community.
- After presenting comparative results, the report breaks down key network data for each topic. Each topic is associated with its own section that digs into research activity by year and identifies the top five researchers based on a measure of scientific influence. This influence score incorporates data on publication count and network metrics.
- Critical information for each researcher is then presented in a “baseball card”-style reference page. This page includes contact information, publication and network metrics, a brief summary of research interests, and a reference for the most-cited article contained within the search results.



US ARMY
RDECOM

SNA Highlights



- All of the research networks are highly centralized (i.e. they are dominated by a small cadre of highly influential community members).
- The most active research areas are:
 - Resilience
 - Self-efficacy
 - Emotion regulation
- Moral character and group cohesion had smaller research communities and citation counts were very low for these topics, which indicates relatively few publications in the open, peer-reviewed literature.
- Apart from resilience, there is relatively little overlap for most topics.



US ARMY
RDECOM

Engaging Research Communities



- It will generally be easier to pick an effective entry point for the denser networks, as those researchers are more likely to have connections with a larger share of a network.
- Due to the research networks being highly centralized, community members tend to be interconnected, forming a nucleus of scientific collaboration. Army researchers can then target key nodes in each network to ensure they are collaborating with central members of the community.

For a copy of the full SNA report, please contact Pls.



US ARMY
RDECOM



Conclusions



US ARMY
RDECOM

A Holistic Approach: What's Missing?



What key ingredients are missing?

- The Social and Emotional (SE) Components.
- To begin a holistic approach for building cognitive overmatch, this effort details prospective areas of research that will hone the social-emotional contributions and highlights opportunities for the Army to integrate CPSE knowledge into a framework that can inform selection, training design, leadership, and materiel enablers.



US ARMY
RDECOM

Relevance



- This research supports the CSA's priority to optimize Soldier readiness and focuses on identifying what is required for Soldiers to prepare, maintain, and build their social and emotional readiness pre-, during, and post-deployment.
- Additionally, this work addresses two Army Warfighting Challenges:

9. Improve Soldier, Leader, and Team Performance

- How to develop resilient Soldiers, adaptive leaders, and cohesive teams committed to the Army professional ethic that are capable of accomplishing the mission in environments of uncertainty and persistent danger.

10. Develop Agile and Adaptive Leaders

- How to develop agile, adaptive, and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, and leading and assessing operations in complex environments and against adaptive enemies.



US ARMY
RDECOM

Unpacking Readiness from the Soldiers' Perspective



The U.S. Army's Ready & Resilient Campaign² defines readiness “as the ability and willingness to perform an assigned task or mission.”

- Soldiers' impression of the definition was that it reflects what readiness means while noting that “there's a lot of weight behind each one of those words” and that it is a “very broad description.”
- Soldiers defined the term *ability* as “having the physical and mental skills to complete a task or mission” and *willingness* as “more of the intangibles, the hard to measure stuff like, attitude, discipline, perseverance, motivation, responsibility, culture, and team cohesion.”
- In their words, “*ability* equals our survivability and *willingness* is ‘I don't want to climb that mountain but *I am willing* because it's not about me, it's about the guy to the left and right of me who will do the same thing,’ so to be qualified to be his teammate, I need to do what I need to do, past what I want to do necessarily.”



US ARMY
RDECOM

Why is the Soldiers Viewpoint So Critical?



- When asked if there was anything missing in the definition, Soldiers highlighted that “it’s not only about an individual,” it’s the “ability and willingness of an individual *and a unit* to perform an assigned task or mission.”
- Soldiers view the Army definition of readiness as accurate yet incomplete, reflective of reality yet obscuring how much preparation and dedication are required to fulfill the promise of “willing and able.”
- Soldiers’ view ability and willingness as equally critical for successful performance.
- These findings underscore the importance that Soldiers place on the role of social dynamics, individuals’ influence and “unit solidarity,” which may be used to help inform or develop building readiness as a function of optimal team composition.



US ARMY
RDECOM

Performing as a Unit



- The importance of performing as a unit was echoed throughout this research, with Soldiers emphasizing leaders' responsibility to facilitate activities that promote group cohesion and establish camaraderie. Leaders perceived that younger Soldiers may have different CPSE foundations which could have implications for how best to build cohesion and camaraderie.
- Soldiers discussed that not wanting to let their fellow Soldier down was key to their motivation (e.g. willingness) to perform. They explained the importance of being able to entrust your life to your fellow Soldier.
- Soldiers also highlighted the significance of leaders fostering their Soldiers' sense of belonging to the unit, the Army, and to their overall mission as a Soldier. This sense of belonging is critical to a Soldiers' willingness to perform.
- A Soldier's ability to perform includes not only their cognitive and physical capabilities, but also their social and emotional intelligence, which is more difficult to assess and train.



US ARMY
RDECOM

Core Competencies



- Leaders described various readiness training methods they currently utilize to ensure knowledge transfer of tactical and technical skills and use of equipment and weapon systems. These skills are often referred to as the “what and how” or primary skills, which are generally delivered through official Army training.
- Other core competencies were physical readiness (e.g. endurance and strength) and “soft skills,” such as emotional awareness, coping, resiliency, and character. These skills are often referred to as supportive or secondary skills.
 - Examples of “secondary” skills identified by the leaders: having patience and understanding, being an active listener, empathy, compassion, and being approachable.
 - Leaders acknowledged the importance of these secondary skills but reported that there was limited training readily available for secondary skills development.



US ARMY
RDECOM

Training



- Leaders could not readily identify specific training programs within the Army designed to strengthen SE skills (with the exception of Master Resiliency Training, MRT).
 - They explained that it is difficult to teach and assess social and emotional competencies and are not always effectively taught in a traditional classroom setting (e.g. with PowerPoint slides).
 - The primary means by which Soldiers gain social and emotional skills is by observing the behaviors of their leaders. This is one of many reasons why it is critical for leaders to be positive role models (both on and off duty) for Soldiers who are constantly observing, adopting, and refining the social and emotional skills and behaviors learned from them.



US ARMY
RDECOM

Leadership Observations



- There were many common threads that ran through all three studies. Specifically, Soldiers discussed:
 - Being able to understand individual Soldier differences, strengths, and weaknesses and use this understanding to optimize communication, discipline, and training styles for each Soldier.
 - Driven, self-assured mentors who embody the Army Values provide their Soldiers with the motivation and confidence to accomplish their missions.
 - Compassion, supportiveness, empathy, self-awareness, and selflessness were just a few of the many traits soldiers described as essential for a good leader.



US ARMY
RDECOM



Recommendations

Investing in a solution. What is called for now.



US ARMY
RDECOM

SE Readiness Needs to be an Army Priority



- Soldiers believed that the Army's current training for "soft skills" is not meeting the operational need for SE readiness. Soldiers acknowledged the importance of these secondary skills but reported that there was limited training readily available. Additionally, awareness for formal SE training must be made known to Leadership through Army messaging.
- Major Army programs devoted to the development of SE readiness are not getting translated into action. Although the Army's stated posture is to develop "trusted Army professionals who thrive in complex social environments, adapt to diverse cultures, communicate effectively, and build relationships," there are not always clear transfers to POI.
- Soldier Readiness requires both the "ability" and "willingness" of a Soldier to perform. The CP domains primarily focus on a Soldier's "ability" (i.e. tactical and technical competencies), whereas "willingness" is addressed primarily through the SE domains. Though the CP domains have long been the focus of readiness research, it is critical to place more emphasis on research within the SE domains to address components of readiness that C and P cannot address.
- To support a holistic approach to Soldier Readiness, funding appropriations must be distributed comparably between SE and CP research and development. Soldiers can perform without honing secondary SE skills; however, they cannot perform to their full potential without cost over time to themselves, their families, and to the Army.



US ARMY
RDECOM

Recommendations for Training



Knowledge products resulting from this research should be transitioned to Army agencies (e.g. TRADOC/ARCIC) and schoolhouses that develop the programs of instruction (POI) for basic training, leadership training, and SE skills/resiliency training.

- Specific KSAs identified such as: emotion regulation, resilience, self-efficacy and moral character should be targeted for cultivation and enhancement through training or practices aimed to build personal, professional, and team development.

Soldier education should incorporate the following types of SE competency training to meet current needs:

- Expand MRT to include unit-level group mindfulness meditation practice (to enhance emotion regulation, self-awareness, coping, resilience)
- Integrate Character Development programs (to increase the importance of integrity, social intelligence, humility, serving others)
- Develop CPSE foundations training program (to boost all domain levels)
- Leverage related ongoing SE research such as the Growth Mindset Model and self-efficacy practices to accelerate and/or increase Soldier learning and retention of key core competencies identified in this research.



US ARMY
RDECOM

Leadership Considerations



This research outlines what leaders need to build mission-ready units by better understanding Soldiers based on individual differences, strengths, and weaknesses that would optimize team and mission performance. Capitalizing on individual strengths within a team can create a synergy that makes the effectiveness of the unit greater than the sum of its parts.

- The behaviors/practices identified as essential for effective leadership include mentoring, group cohesion, and prosocial behavior training or practices that are designed to build personal, professional, and team development.
- An informal “passing down of knowledge” has been incorporated into the Army culture whereby leaders share best practices and the next generation of leaders adopts what resonates with them. Attaining this knowledge has been attributed to an “art” of the leader’s ability to teach and luck of the junior leader to find a mentor that is a good fit for them.
- Teaching is a significant part of a leader’s duty; however, they do not receive explicit training on what it takes to be an effective teacher.

The Army should incorporate the following types of SE practices to meet and promote requirements:

- Formal Mentoring Program (to provide psychosocial support, knowledge transfer of “secondary skills” such as interpersonal skills, conflict resolution, and how to build team cohesion)
- Formal Teaching Classes (to be able to translate knowledge into hands on experience, techniques to maximize retention of KSAs)

UNCLASSIFIED



US ARMY
RDECOM

Recommendations for Soldier Selection



Apply SE core competencies knowledge to inform Soldier selection.

- These findings outline traits that should be considered alongside current tests used to improve the selection process of Soldier recruits (e.g., Armed Services Vocational Aptitude Battery (ASVAB) and Tailored Adaptive Personality Assessment System (TAPAS)).



US ARMY
RDECOM

Recommendations for Future Research & Development



We anticipate that the work completed under these studies will drive “spin off” projects that could employ experimental and other methods to dig deeply into particular aspects of social-emotional domains. We believe that ongoing research could establish a virtuous cycle of iterative improvements to the established CPSE framework.

Future Research:

- Further research should expand our understanding of SE domains.
- Build upon Study 1’s methodology and collect quantifiable data to understand CPSE fluctuations of resources.
- Develop CPSE model to predict interactions.
- Continue research on mitigation strategies to be utilized when CPSE resources become depleted. This knowledge can be transitioned to broaden current POIs that enhance readiness and resilience.

Long-Range Development:

- These data provide a foundation that can be applied towards the development of a Soldier/Leader Readiness and Resilience Prediction Tool that utilizes the CPSE model and SE core competency metrics (still to be determined). This tool could be utilized by leaders to assess, monitor, and predict CPSE status at the individual and unit level.
- Expand SE Training programs and develop “suite of apps” for real-time utilization.
- Create Commander Dashboard display which would allow flexibility for Leaders to assess and tailor training to individual and unit needs.



US ARMY
RDECOM

Limitations



- These data should be considered pilot data or preliminary work as it only represents a small sample of interviews (n=17) and essays (n=84) from one Army installation but demonstrates a framework that may be used in future studies to better understand and predict CPSE fluctuations and interactions.
- The data compiled from the leadership essays were a convenience sample. Because the essays were obtained through a unit training activity, researchers were unable to strategically recruit enough participants to obtain a fully representative or stratified sample of participants.



US ARMY
RDECOM

Potential Organizations that Could Benefit from this Research



Organizations that this work can inform, transition and partner:

- US Army Research Laboratory (ARL)
- US Army Research Institute (ARI)
- US Army Training and Doctrine Command (TRADOC)
- US Army Capabilities Integration Center (ARCIC)
- US Army Maneuver Center of Excellence (MCoE)
- The Maneuver Captains Career Course (MC3)
- US Army Special Operations Center of Excellence (SOCoE)
- US Army Sergeant Majors Academy (USASMA)
- US Army Noncommissioned Officer Academy (NCOA)
- The Center for the Army Profession and Ethic (CAPE)
- Soldiers' Greenbook Pilot



US ARMY
RDECOM

Acknowledgements



Thank you to the Soldiers that participated in these studies for their time and willingness to generously share their experiences.



US ARMY
RDECOM

References



- The US Army's Ready & Resilient Campaign EXORD (2013) <http://www.army.mil/readyandresilient>
- Comprehensive Soldier & Family Fitness AR 350-53 (2014)
- https://www.army.mil/e2/downloads/rv7/r2/policydocs/r350_53.pdf
- The Human Dimension Concept (2014)
- <http://www.tradoc.army.mil/tpubs/pams/TP525-3-7.pdf>
- The Human Dimension White Paper (2014)
- The Human Dimension Strategy EXORD (2015)
- The Context of Military Environments: An Agenda for Basic Research on Social and Organizational Factors Relevant to Small Units. The National Academies Press (2014)
- The U.S. Army Operating Concept (AOC), TRADOC Pamphlet 525-3-1, "Win in a Complex World 2020-2040" (2014)
- HQDA OPORD Enduring Personal Readiness and Resilience, 2016
- R2 Strategic Framework Slides (2016)
- <https://www.army.mil/e2/downloads/rv7/r2/R2%20Strategic%20Framework%201DEC16.pdf>
- DeCuir-Gunby JT, Marshall PL, McCulloch AL. Developing and using a codebook for the analysis of interview data: an example from a professional development research project. Field Methods. 2011; 23(2): 136-155. <http://dx.doi.org/10.1177/1525822210388468>
- Vaismoradi, M, Jones, J., Turunen H, Snelgrove, S. Theme development in qualitative content analysis and thematic analysis. Journal of Nursing Education and Practice. 2016 Jan; 5 (6):100-110.
- Loehr & Schwartz, The Making of a Corporate Athlete, Harvard Business Review, 2001.
- Wikipedia, Definition of Themes in Taxonomy



US ARMY
RDECOM

Points of contact



Ellen Merrill, MA
Research Psychologist
Cognitive Science & Applications Team
Warfighter Directorate
U.S. Army Natick Soldier RD&E Center
508-233-5116
ellen.p.merrill.civ@mail.mil

Justine Federici
Engineering Psychologist
Consumer Research Team
Warfighter Directorate
U.S. Army Natick Soldier RD&E Center
508-233-4321
justine.federici.civ@mail.mil